WHAT IS CLAIMED:

1. A method comprising:

providing a plant or plant seed comprising a transgene conferring a transgenic trait to the plant or a plant grown from the plant seed, and

applying to the plant or plant seed a hypersensitive response elicitor protein or polypeptide.

2. The method according to claim 1, wherein said applying is carried out under conditions effective to impart enhanced growth, stress tolerance, disease resistance, or insect resistance to the plant or the plant grown from the plant seed, thereby maximizing the benefit of the transgenic trait to the plant or the plant grown from the plant seed.

3. The method according to claim 2, said applying is carried out on a plant.

4. The method according to claim 3, wherein said applying is carried out by spraying, injection, dusting, or leaf abrasion at a time proximate to when said applying takes place.

5. The method according to claim 2, wherein said applying is carried out on a plant seed.

6. The method according to claim 5, wherein said applying is carried out by spraying, injection, coating, dusting, or immersion.

7. The method according to claim 2, wherein the hypersensitive response elicitor polypeptide or protein is applied to the plant or plant seed as a composition further comprising a carrier.

8. The method according to claim 7, wherein the carrier is selected from the group consisting of water, aqueous solutions, slurries, and powders.

9. The method according to claim 7, wherein the composition contains greater than 0.5 nM of the hypersensitive response elicitor polypeptide or protein.

10. The method according to claim 2, wherein the hypersensitive response elicitor polypeptide or protein is in isolated form.

11. The method according to claim 2, wherein the hypersensitive response elicitor protein or polypeptide is derived from a species of pathogen selected from the group consisting of *Erwinia*, *Xanthomonas*, *Pseudomonas*, *Phytophthora*, and *Clavibacter*.

12. The method according to claim 1, wherein the transgenic trait is associated with a deleterious effect on growth, stress tolerance, disease resistance, or insect resistance in the transgenic plant and said applying is carried out under conditions effective to impart enhanced growth, stress tolerance, disease resistance, or insect resistance to the plant or the plant grown from the plant seed, thereby overcoming the deleterious effect.

13. The method according to claim 12, said applying is carried out on a plant.

14. The method according to claim 13, wherein said applying is carried out by spraying, injection, dusting, or leaf abrasion at a time proximate to when said applying takes place.

15. The method according to claim 12, wherein said applying is carried out on a plant seed.

16. The method according to claim 15, wherein said applying is carried out by spraying, injection, coating, dusting, or immersion.

17. The method according to claim 12, wherein the hypersensitive response elicitor polypeptide or protein is applied to the plant or plant seed as a composition further comprising a carrier.

18. The method according to claim 17, wherein the carrier is selected from the group consisting of water, aqueous solutions, slurries, and powders.

19. The method according to claim 17, wherein the composition contains greater than 0.5 nM of the hypersensitive response elicitor polypeptide or protein.

20. The method according to claim 12, wherein the hypersensitive response elicitor polypeptide or protein is in isolated form.

21. The method according to claim 12, wherein the hypersensitive response elicitor protein or polypeptide is derived from a species of pathogen selected from the group consisting of *Erwinia*, *Xanthomonas*, *Pseudomonas*, *Phytophthora*, and *Clavibacter*.

22. A method comprising:

providing a plant cell;

transforming the plant cell with (i) a first DNA molecule encoding a transcript or a protein or polypeptide which confers a trait to a plant grown from the transformed plant cell and (ii) a second DNA molecule encoding a hypersensitive response elicitor protein or polypeptide which is different than the protein or polypeptide encoded by the first DNA molecule, said transforming being carried out under conditions effective to produce a transgenic plant cell; and

regenerating a transgenic plant from the transformed plant cell.

23. The method according to claim 22, wherein said transforming with the second DNA molecule imparts enhanced growth, stress tolerance, disease resistance, or insect resistance to the plant, thereby maximizing benefit to the plant of the trait conferred by said transforming with the first DNA molecule.

24. The method according to claim 22, wherein said transforming with the first DNA molecule is accompanied by a deleterious effect on growth, stress tolerance, disease resistance, or insect resistance and wherein said transforming with the second DNA molecule overcomes the deleterious effect.

25. The method according to claim 22, wherein said transforming is carried out by

transforming the plant cell with the first DNA molecule to form a singly transformed plant cell and

transforming the singly transformed plant cell with the second DNA molecule.

26. The method according to claim 22, wherein said transforming is carried out by

transforming the plant cell with the second DNA molecule to form a singly transformed plant cell and

transforming the singly transformed plant cell with the first DNA molecule.

27. The method according to claim 22, wherein said transforming is carried out by simultaneously transforming the plant cell with the first and second DNA molecules.

28. The method according to claim 22, wherein said transforming is performed under conditions effective to insert the first and second DNA molecules into the genome of the transformed plant cell.

29. The method according to claim 22, wherein said transforming is *Agrobacterium* mediated.

30. The method according to claim 22, wherein said transforming comprises:

propelling particles at the plant cell under conditions effective for the particles to penetrate into the cell interior and

introducing one or more expression vectors into the plant cell interior, the one or more expression vectors comprising either the first DNA molecule, the second DNA molecule, or both the first and second DNA molecules.

31. The method according to claim 22, wherein the hypersensitive response elicitor protein or polypeptide is derived from a species of pathogen selected from the group consisting of *Erwinia*, *Xanthomonas*, *Pseudomonas*, *Phytophthora*, and *Clavibacter*.

32. The method according to claim 22, wherein the first DNA molecule encodes a protein or polypeptide selected from the group consisting of B.t. toxin, *Photorahabdus luminscens* protein, protease inhibitors, amylase inhibitors, lectins, chitinases, endochitinase, chitobiase, defensins, osmotins, crystal proteins, virus proteins, and SAMase.

33. The method according to claim 22, wherein the first DNA molecule encodes a transcript selected from the group consisting of antisense RNA and sense RNA.

34. The method according to claim 22, wherein the first DNA molecule encodes antisense RNA which interferes with activity of an enzyme or synthesis of a product.

35. The method according to claim 22, wherein the first DNA molecule comprises:

a promoter operable in plants;

a DNA coding sequence operably coupled 3' of the promoter, the DNA coding sequence encoding the transcript or the protein or polypeptide which confers the trait; and

a 3' regulatory region operably coupled to the DNA coding sequence.

36. The method according to claim 22, wherein the second DNA molecule comprises:

a promoter operable in plants;

a DNA coding sequence operably coupled 3' of the promoter, the DNA coding sequence encoding the hypersensitive response elicitor protein or polypeptide; and

a 3' regulatory region operably coupled to the DNA coding sequence.

37. A transgenic plant comprising:

a first DNA molecule encoding a transcript or a protein or polypeptide that confers a trait and

a second DNA molecule encoding a hypersensitive response elicitor protein or polypeptide different than the protein or polypeptide encoded by the first DNA molecule.

38. The transgenic plant according to claim 37, wherein the first and second DNA molecules are stably inserted into the genome of the transgenic plant.

39. The transgenic plant according to claim 37, wherein the transgenic plant is selected from the group consisting of rice, wheat, barley, rye, cotton, sunflower, peanut, corn, potato, sweet potato, bean, pea, chicory, lettuce, endive, cabbage, canola, cauliflower, broccoli, turnip, radish, spinach, onion, garlic, eggplant, pepper, celery, carrot, squash, pumpkin, zucchini, cucumber, apple, pear, melon, strawberry, cranberry, grape, raspberry, pineapple, soybean, tobacco, tomato, sorghum, and sugarcane.

40. The transgenic plant according to claim 37, wherein the hypersensitive response elicitor protein or polypeptide is derived from a species of pathogen selected from the group consisting of *Erwinia*, *Xanthomonas*, *Pseudomonas*, *Phytophthora*, and *Clavibacter*.

41. The transgenic plant according to claim 37, wherein the trait is selected from the group consisting of disease resistance, insect resistance, enhanced growth, herbicide resistance, stress tolerance, male sterility, modified flower color, and biochemically modified plant product.

42. The transgenic plant according to claim 41, wherein the first DNA molecule encodes a protein or polypeptide selected from the group consisting of B.t. toxin, *Photorahabdus luminscens* protein, protease inhibitors, amylase inhibitors, lectins, chitinases, endochitinase, chitobiase, defensins, osmotins, crystal proteins, virus proteins, herbicide resistance proteins, mannitol dehydrogenase, PG inhibitors, ACC degradation proteins, barnase, phytase, fructans, invertase, and SAMase.

43. The transgenic plant according to claim 41, wherein the first DNA molecule encodes a transcript selected from the group consisting of antisense RNA and sense RNA.

44. The transgenic plant according to claim 43, wherein the first DNA molecule encodes antisense RNA which interferes with activity of an enzyme or synthesis of a product.

45. A transgenic plant seed obtained from the transgenic plant according to claim 37.

46. A system for use in transforming plants with multiple DNA molecules, said system comprising:

a first DNA construct comprising a first DNA molecule which confers a trait to a host plant, and

a second DNA construct comprising a second DNA molecule encoding a hypersensitive response elicitor protein or polypeptide.

47. The system according to claim 46, wherein the hypersensitive response elicitor protein or polypeptide is derived from a species of pathogen selected from the group consisting of *Erwinia*, *Xanthomonas*, *Pseudomonas*, *Phytophthora*, and *Clavibacter*.

48. The system according to claim 46, wherein the trait is selected from the group consisting of disease resistance, insect resistance, enhanced growth, herbicide resistance, stress tolerance, male sterility, modified flower color, and biochemically modified plant product.

49. The system according to claim 48, wherein the first DNA molecule encodes a protein or polypeptide selected from the group consisting of Bt toxin, *Photorahabdus luminscens* protein, protease inhibitors, amylase inhibitors, lectins, chitinases, endochitinase, chitobiase, defensins, osmotins, crystal proteins, virus proteins, herbicide resistance proteins, mannitol dehydrogenase, PG inhibitors, ACC degradation proteins, barnase, phytase, fructans, invertase, and SAMase.

50. The system according to claim 48, wherein the first DNA molecule encodes a transcript selected from the group consisting of antisense RNA and sense RNA.

51. The system according to claim 50, wherein the first DNA molecule encodes antisense RNA which interferes with activity of an enzyme or synthesis of a product.

52. An expression system comprising first and second vectors into which the system according to claim 46 is inserted, wherein the first DNA construct is inserted into the first vector and the second DNA construct is inserted into the second vector.

53. A transgenic host cell comprising:

a first DNA molecule encoding a transcript or a protein or polypeptide that confers a trait to a host plant and

a second DNA molecule encoding a hypersensitive response elicitor protein or polypeptide which is different than the protein or polypeptide encoded by the first DNA molecule.

54. The transgenic host cell according to claim 53, wherein the host cell is a bacterial cell or a plant cell.

55. The transgenic host cell according to claim 54, wherein the host cell is a bacterial cell.

56. The transgenic host cell according to claim 55, wherein the bacterial cell is an *Agrobacterium* cell.

57. The transgenic host cell according to claim 54, wherein the host cell is a plant cell.

58. The transgenic host cell according to claim 57, wherein the first and second DNA molecules are stably inserted into the genome of the plant cell.

59. The transgenic host cell according to claim 53, wherein the hypersensitive response elicitor protein or polypeptide is derived from a species of pathogen selected from the group consisting of *Erwinia*, *Xanthomonas*, *Pseudomonas*, *Phytophthora*, and *Clavibacter*.

60. The transgenic host cell according to claim 53, wherein the trait is selected from the group consisting of disease resistance, insect resistance, enhanced growth, herbicide resistance, stress tolerance, male sterility, modified flower color, and biochemically modified plant product.

61. The transgenic host cell according to claim 60, wherein the first DNA molecule encodes a protein or polypeptide selected from the group consisting of B.t. toxin, *Photorahabdus luminscens* protein, protease inhibitors, amylase inhibitors, lectins, chitinases, endochitinase, chitobiase, defensins, osmotins, crystal proteins, virus proteins, herbicide resistance proteins, mannitol dehydrogenase, PG inhibitors, ACC degradation proteins, barnase, phytase, fructans, invertase, and SAMase.

62. The transgenic host cell according to claim 60, wherein the first DNA molecule encodes a transcript selected from the group consisting of antisense RNA and sense RNA.

63. The transgenic host cell according to claim 62, wherein the first DNA molecule encodes antisense RNA which interferes with activity of an enzyme or synthesis of a product.

64. A DNA construct comprising:

a first DNA molecule which confers a trait to a host plant and

a second DNA molecule encoding a hypersensitive response elicitor protein or polypeptide.

65. The DNA construct according to claim 64, wherein the hypersensitive response elicitor protein or polypeptide is derived from a species of pathogen selected from the group consisting of *Erwinia*, *Xanthomonas*, *Pseudomonas*, *Phytophthora*, and *Clavibacter*.

66. The DNA construct according to claim 64, wherein the trait is selected from the group consisting of disease resistance, insect resistance, enhanced growth, herbicide resistance, stress tolerance, male sterility, modified flower color, and biochemically modified plant product.

67. The DNA construct according to claim 66, wherein first DNA molecule encodes a protein or polypeptide selected from the group consisting of B.t. toxin, *Photorahabdus luminscens* protein, protease inhibitors, amylase inhibitors, lectins, chitinases, endochitinase, chitobiase, defensins, osmotins, crystal proteins, virus proteins, herbicide resistance proteins, mannitol dehydrogenase, PG inhibitors, ACC degradation proteins, barnase, phytase, fructans, invertase, and SAMase.

68. The DNA construct according to claim 66, wherein the first DNA molecule encodes a transcript selected from the group consisting of antisense RNA and sense RNA.

69. The DNA construct according to claim 68, wherein the first DNA molecule encodes antisense RNA which interferes with activity of an enzyme or synthesis of a product.

70. The DNA construct according to claim 64 further comprising:

a first promoter operable in plant cells operably linked 5' to one or both of the first and second DNA molecules and

a first 3' regulatory region operably linked 3' to one or both of the first and second DNA molecules.

71. The DNA construct according to claim 70, wherein the first promoter is inducible.

72. The DNA construct according to claim 70, wherein the first promoter and the first 3' regulatory region are operably linked 5' to the first DNA molecule but not the second DNA molecule, the DNA construct further comprising:

a second promoter operably linked 5' to the second DNA molecule and

a second 3' regulatory region operably linked 3' to the second DNA molecule.

73. The DNA construct according to claim 72, wherein the first and second promoters are different.

74. An expression system comprising a vector into which is inserted a heterologous DNA construct according to claim 64.